

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-36. (Canceled)

37. (new) A structured data receiving method of receiving a plurality of fragment data constituting a structured data having a tree structure and a plurality of fragment data configuration information, each of which is created for each fragment data, to concatenate the plurality of fragment data at a receiving side to generate the structured data,

each piece of fragment data configuration information including reference information and position information, wherein the reference information has location information on a location of corresponding fragment data, and the position information is information on a connection position of the corresponding fragment data in the structured data,

the structured data receiving method comprising the steps of:

adding reference information included in each piece of received fragment data configuration information to a position where each corresponding fragment data is to be concatenated in the structured data, based on position information included in said each piece of received fragment data configuration information;

specifying the location where there is said each corresponding fragment data based on the reference information added to the position where said each corresponding fragment data is to be concatenated in the structured data, responsive to an instruction for concatenating said each corresponding fragment data;

receiving a fragment data from the specified location; and

replacing by the received fragment data the reference information added to the position where said each corresponding fragment data is to be concatenated and concatenating the received fragment data to generate the structured data;

wherein,

the structured data includes at least one node each having at least one lower node located at one level lower or having no lower node, a position order of the at least one lower node being determined,

the position information includes information specifying a node in the structured data and information specifying a connection position of the corresponding fragment data in relation to the specified node,

the information specifying the connection position of the corresponding fragment data is information specifying a position immediately before the specified node or information specifying a last position at one level lower than the specified node,

if the information specifying the connection position of the corresponding fragment data is the information specifying the position immediately before the specified node, then connecting a highest node of the corresponding fragment data to a position immediately before the specified node at the same level as the specified node,

if the information specifying the connection position of the corresponding fragment data is the information specifying the last position at one level lower than the specified node, then connecting the highest node of the corresponding fragment data to a position after a last node among the at least one lower node of the specified node when the specified node has the at least one lower node and connecting the highest node as a first lower node of the specified node when the specified node has no lower node.

38. (new) A structured data receiving method of receiving a plurality of fragment data constituting a structured data having a tree structure and a plurality of fragment data configuration information, each of which is created for each fragment data, to concatenate the plurality of fragment data at a receiving side to generate the structured data,

the structured data having the tree structure that is metadata describing the detail of structured multimedia content, and

each piece of fragment data configuration information including reference information and position information, wherein the reference information has location information on a location of

corresponding fragment data, and the position information is information on a connection position of the corresponding fragment data in the structured data,

the structured data receiving method comprising the steps of:

adding reference information included in each piece of received fragment data configuration information to a position where each corresponding fragment data is to be concatenated in the structured data, based on position information included in said each piece of received fragment data configuration information;

specifying the location where there is said each corresponding fragment data based on the reference information added to the position where said each corresponding fragment data is to be concatenated in the structured data, responsive to an instruction for concatenating said each corresponding fragment data;

receiving a fragment data from the specified location; and

replacing by the received fragment data the reference information added to the position where said each corresponding fragment data is to be concatenated and concatenating the received fragment data to generate the structured data;

wherein,

the structured data includes at least one node each having at least one lower node located at one level lower or having no lower node, a position order of the at least one lower node being determined,

the position information includes information specifying a node in the structured data and information specifying a connection position of the corresponding fragment data in relation to the specified node,

the information specifying the connection position of the corresponding fragment data is information specifying a position immediately before the specified node or information specifying a last position at one level lower than the specified node,

if the information specifying the connection position of the corresponding fragment data is the information specifying the position immediately before the specified node, then connecting a highest node of the corresponding fragment data to a position immediately before the specified node at the same level as the specified node,

if the information specifying the connection position of the corresponding fragment data is the information specifying the last position at one level lower than the specified node, then connecting the highest node of the corresponding fragment data to a position after a last node among the at least one lower node of the specified node when the specified node has the at least one lower node and connecting the highest node as a first lower node of the specified node when the specified node has no lower node.

39. (new) A structured data receiving method of receiving a plurality of fragment data constituting a structured data having a tree structure and a plurality of fragment data configuration information, each of which is created for each fragment data, to concatenate the plurality of fragment data at a receiving side to generate the structured data,

each piece of fragment data configuration information including reference information and position information, wherein the reference information has location information on a location of corresponding fragment data, and the position information is information on a connection position of the corresponding fragment data in the structured data,

the structured data receiving method comprising the steps of:

adding reference information included in each piece of received fragment data configuration information to a position where each corresponding fragment data is to be concatenated in the structured data, based on position information included in said each piece of received fragment data configuration information;

wherein the reference information includes URI (Uniform Resource Identifier) indicating a resource in a network, and each fragment data is received through the network as the resource in the network,

specifying the location where there is said each corresponding fragment data in the network based on the URI included in the reference information added to the position where said each corresponding fragment data is to be concatenated in the structured data, responsive to an instruction for concatenating said each corresponding fragment data;

receiving a fragment data from the specified location through the network; and

replacing by the received fragment data the reference information added to the position where said each corresponding fragment data is to be concatenated and concatenating the received fragment data to generate the structured data;

wherein,

the structured data includes at least one node each having at least one lower node located at one level lower or having no lower node, a position order of the at least one lower node being determined,

the position information includes information specifying a node in the structured data and information specifying a connection position of the corresponding fragment data in relation to the specified node,

the information specifying the connection position of the corresponding fragment data is information specifying a position immediately before the specified node or information specifying a last position at one level lower than the specified node,

if the information specifying the connection position of the corresponding fragment data is the information specifying the position immediately before the specified node, then connecting a highest node of the corresponding fragment data to a position immediately before the specified node at the same level as the specified node,

if the information specifying the connection position of the corresponding fragment data is the information specifying the last position at one level lower than the specified node, then connecting the highest node of the corresponding fragment data to a position after a last node among the at least one lower node of the specified node when the specified node has the at least one lower node and connecting the highest node as a last lower node of the specified node when the specified node has no lower node.